

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Tall Corn Ethanol, LLC
(TCE, LLC)
Facility Location: 1015 Grant Avenue
Coon Rapids. IA 50058

Air Quality Operating Permit Number: 07-TV-001-M001
Expiration Date: January 9, 2012

EIQ Number: 92-6922
Facility File Number: 14-03-006

Responsible Official

Name: Owen Shunkwiler
Title: General Manager
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Permit Contact Person for the Facility

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS	new source performance standard
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compounds
CO	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Tall Corn Ethanol, LLC

Permit Number: 07-TV-001-M001

Facility Description: Industrial Organic Chemicals (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
SV1	EU1	3 Corn Receiving Pits	01-A-434-S2
	EU2	Elevator & Conveyors	
	EU3	6 Grain Bins	
SV2	EU4	Corn Scalper, Elevator & Surge Bin	01-A-435
SV4	EU4.1	Beer Well	01-A-437 S5
	EU4.2	Fermenters	
	EU4.3	Fermenters	
	EU4.4	Fermenters	
	EU4.5	Fermenters	
	EU4.6	Fermenters	
		Thermal Oxidizer	
SV5	EU7	Distillation	01-A-438 S4
SV6	EU8a	Rotary Distiller's Grain Dryer # 1 Process	01-A-439 S6
	EU8b	Rotary Distiller's Grain Dryer # 1 Combustion	
	EU9a	Rotary Distiller's Grain Dryer # 2 Process	
	EU9b	Rotary Distiller's Grain Dryer # 2 Combustion	
	EU15	Centrifuges # 1	
	EU16	Centrifuges # 2	
	EU17	Centrifuges # 3	
	EU18	Centrifuges # 4	
	EU30	Centrifuges # 5	
SV 6A		Dryers 1&2 Purge/Bypass Stack	02-A-505 S1
SV7	EU10	Dried Distiller's Grain Cooling Cyclone	01-A-440 S4
SV8	EU11	Dried Distiller's Grain Storage Silo	01-A-441
SV9	EU12	Boiler # 1	01-A-442 S3
SV10	EU13	Boiler # 2	01-A-443 S3
SV11	EU14	Boiler # 3	01-A-444 S3
SV 22	EU19	Diesel Generator	02-A-510-S2
SV Flare1	EU20	Ethanol Truck Load out	02-A-788-S3
SV23	EU21	Corn Cleaning Section	04-A-577-S1
SV24	EU22	Debranning Section	04-A-578-S1
SV25	EU23	General Exhaust System	05-A-579 S1
SV26	EU24a	Corn Germ Dryer Process	05-A-580 S1

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
	EU24b	Corn Germ Dryer Combustion	
SV27	EU25	Germ Dryer & Receiver	05-A-581
SV28	EU26	Fiber Receiver	04-A-582
SV29	EU27	Hammermill # 1	04-A-583 S1
SV30	EU28	Hammermill # 2	04-A-584
SV31	EU29	Pneumatic Flour Conveyor/Receiver	04-A-979
SV32	EU31	Air Heater (in Corn Separation Building)	04-A-1006
WFB	EU WFB	Wet Fiber Building	04-A-980
CT	EU CT	Cooling Tower	
FUGITIVE 1	EU Fugitive 1	Corn Receiving- Truck & Railcar	
F002	EU F002	Fugitive dust from truck traffic	07-A-1286
FUGITIVE 2	EU Fugitive 2	Equipment Leaks	
FUGITIVE 3	EU Fugitive 3	Ethanol Rail Loading	
SV12	TK-001	190 Proof Ethanol Tank	01-A-445
SV13	TK-002	Unleaded Gasoline/ Denaturant Tank	01-A-446 S1
SV14	TK-003	Denatured Ethanol Tank	01-A-447 S1
SV15	TK-004	Denatured Ethanol Tank	01-A-448 S1
SV17	TK-006	200 Proof Ethanol Tank	01-A-449

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TK-005	Corrosion Inhibitor Storage Tank Horizontal, 1000 gallons
TK-007	Syrup Storage Tank, 61,000 gallons
TK-7	Thin Stillage Storage Tank, 450,000 gallons
NA	Diesel Storage Tank Horizontal. 500 gallons
NA	Sulfuric Acid Storage Tank (93%)
FUGITIVE 4	DDG & Germ Product Loading
	Maintenance Parts Washer
	Centrifuge Bypass Vent
	Boiler Room Sump

II. Plant-Wide Conditions

Facility Name: Tall Corn Ethanol, LLC

Permit Number: 07-TV-001-M001

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: 5 Years

Commencing on: January 10, 2007

Ending on: January 9, 2012

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Tall Corn Ethanol, LLC is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Tall Corn Ethanol, LLC shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

40 CFR 60 Subpart A - General Provisions

Except as provided in Subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility. This facility is an affected source and these General Provisions apply to the facility.

See Appendix for the complete text of the Standard.
Authority for Requirements: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart VV Requirements

This facility is subject to the Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry. The affected units are EP SV 4, SV5, SV6, SV12, SV14, SV15 and SV 17. See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart VV
567 IAC 23.1(2) "nn"

40 CFR 60 Subpart Dc Requirements

This facility is subject to the Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units. The affected units are EP SV 9, 10 and 11.

Applicable requirements are incorporated in the Emission Point Specific conditions. See Appendix for the complete text of the Standard.

Authority for Requirements: 40 CFR 60 Subpart Dc
567 IAC 23.1 (2) "III"

40 CFR 60 Subpart Kb Requirements

This facility is subject to the Standards of Performance for Volatile Organic Liquid storage vessels (including petroleum liquids). This is applicable for storage tanks constructed after July 1984. The affected units are Storage Tanks EP SV 12, 13, 14, 15 and 17. See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Kb
567 IAC 23.1(2) "ddd"

40 CFR 60 Subpart DD Requirements

This facility is subject to the Standards of Performance for Grain Elevators. The affected unit is EP SV1. See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart DD
567 IAC 23.1(2) "ooo"

III. Emission Point-Specific Conditions

Facility Name: Tall Corn Ethanol, LLC

Permit Number: **07-TV-001-M001**

Emission Point ID Number: SV1

Associated Equipment

Associated Emission Unit ID Numbers: EU1, EU2, EU3 (See table below)

Emissions Control Equipment ID Number: CS1

Emissions Control Equipment Description: Pulse Jet Bughouse

Emission Unit vented through this Emission Point: EU1, EU2, and EU3

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SV1	EU1	3 Corn Receiving Pits	Corn	840 tons/hr
	EU2	Elevator & Conveyors	Corn	
	EU3	6 Grain Bins	Corn	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-434-S2
567 IAC 23.1 (2) "ooo"

Pollutant: PM₁₀

Emission Limit(s): 1.1 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-434-S2

Pollutant: Particulate Matter

Emission Limit(s): 1.1 lb/hr, 0.01 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-434-S2
567 IAC 23.1 (2) "ooo"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

1. POET Biorefining - Coon Rapids is subject to the requirements/conditions of New Source Performance Standards (NSPS) Subpart DD- Standards of Performance for Grain Elevators as specified in 40 CFR Part 60 §60.300. See Appendix for the complete text of the Standard.
2. POET Biorefining - Coon Rapids is subject to the requirements/conditions of NSPS Subpart A-General Provisions.

Operating Limits:

1. The maximum amount of corn received at POET Biorefining - Coon Rapids (Plant No. 14-03-006) shall not exceed 26.13 million bushels of corn per rolling 12-month period.
2. The maximum amount of corn processed at POET Biorefining - Coon Rapids (Plant No. 14-03-006) shall not exceed 23.13 million bushels of corn per rolling 12-month period.
3. Maintain Pulse Jet Baghouse (CS1) according to manufacturer specifications and maintenance schedule.

The owner or operator is required to lock-out aeration fan during the loading of Grain Bins (EU3) and shall continue to operate the system under negative pressure (vent emissions through Pulse Jet Baghouse) for a minimum of 30 minutes after loading of Grain Bins (EU3) has been completed.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Record on a monthly basis, the amount of corn received at POET Biorefining-Coon Rapids (Plant No. 14-03-006) in bushels. Calculate and record rolling 12-month totals.
2. Record on a monthly basis, the amount of corn processed at POET Biorefining-Coon Rapids (Plant No. 14-03-006) in bushels. Calculate and record rolling 12-month totals.
3. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Pulse Jet Baghouse (CS1).

Authority for Requirement: Iowa DNR Construction Permit 01-A-434-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 58

Stack Opening, (inches): 20x40

Exhaust Flow Rate (scfm): 23,450

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-434-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Visible emissions shall be observed on a weekly basis to ensure that none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV2

Associated Equipment

Associated Emission Unit ID Numbers: EU4
Emissions Control Equipment ID Number: CS2
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU4
Emission Unit Description: Corn Scalper, Elevator & Surge Bin
Raw Material/Fuel: Corn
Rated Capacity: 140 Tons Corn/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-435
567 IAC 23.3 (2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-435

Pollutant: Particulate Matter

Emission Limit(s): 0.15 lb/hr, 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-435
567 IAC 23.3 (2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

1. The control equipment shall be inspected and maintained according to manufacturer's specification.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner and operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: Iowa DNR Construction Permit 01-A-435

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68

Stack Opening, (inches): 8x10

Exhaust Flow Rate (scfm): 2500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed or Horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-435

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV4

Associated Equipment

Associated Emission Unit ID Numbers: EU4.1, EU 4.2, EU 4.3, EU4.4, EU 4.5, EU 4.6, EU 4.7 (See Table Below)

Emissions Control Equipment ID Number: CS4 & CS12

Emissions Control Equipment Description: Packed Bed Wet Scrubber & Recuperative Thermal Oxidizer (RTO)

Continuous Emissions Monitors ID Numbers: TT 851-1

Emission Unit vented through this Emission Point:

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SV4	EU 4.1	Beer Well	Corn Mash	207 tons mash/hr
	EU 4.2	Fermenter	Corn Mash	207 tons mash/hr
	EU 4.3	Fermenter	Corn Mash	207 tons mash/hr
	EU 4.4	Fermenter	Corn Mash	207 tons mash/hr
	EU 4.5	Fermenter	Corn Mash	207 tons mash/hr
	EU 4.6	Fermenter	Corn Mash	207 tons mash/hr
		Thermal Oxidizer	Natural Gas	10 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5
567 IAC 23.3(2) "d"

- (1) An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Particulate Matter
Emission Limit(s): 0.10 lb/hr, 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5
567 IAC 23.3 (2) "a"

Pollutant: Nitrogen Oxides, NO_x
Emission Limit(s): 1.2 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Volatile Organic Compounds, VOC
Emission Limit(s): 1.0 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Carbon Monoxide, CO
Emission Limit(s): 0.82 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Acetaldehyde, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Acrolein, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Formaldehyde, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Methanol, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Pollutant: Total HAP
Emission Limit(s): 4.17 lb/hr, (Combined limit for EP SV4, EP SV5,
EP SV6 & EP SV7), 24.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The New Source Performance Standard, 40 CFR 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, applies to this plant. See Appendix for the complete text of the Standard.

Operating Limits

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.
2. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 60.489.
3. The thermal oxidizer shall maintain a temperature (3 hour average) during operation of within +/-50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the most recent performance test which demonstrated compliance with the emission limits, and shall be operated at all times the equipment is being used.
4. The thermal oxidizer shall combust only natural gas and/or process offgases.

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The owner or operator shall keep hourly records of the operating temperature of the thermal oxidizer, and record all three hour periods (during actual operation) during which the average temperature of the oxidizer is more or less than 50 degrees Fahrenheit of the average temperature of the oxidizer during the most recent performance test which demonstrated compliance with the emission limits.
3. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 13,000

Exhaust Temperature (°F): 440

Discharge Style: Vertical unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-437 S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant: VOC

1st Stack Test to be Completed by: 1/9/2009

Test Method: 40 CFR 60, Appendix A, Method 25 A

Authority for Requirement: 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Relevant requirements of CAM plan for this equipment: VOC

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring (CAM) Plan for EU 4.7

I. Background

A. Emissions Unit

Facility: Tall Corn Ethanol (TCE) Coon Rapids, Iowa
Description: Beer Well (EU4.1) and 5 Batch Fermenters (EU4.2 to 4.6)
Identification: EU 4.1, 4.2, 4.3, 4.4, 4.5 and 4.6

B. Control Equipment

Description: **Packed Bed Wet Scrubber (CS4)**
Recuperative Thermal Oxidizer (CS12)
Identification: CS4 AND CS 12
PTE before controls: 438 ton/year VOC
PTE after controls: 4.38 ton/year VOC @ 99.0% efficiency

C. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 01-A-437-S5
VOC Emission Limit: 1.0 lb/hr VOC

II. Packed Bed Wet Scrubber (CS4) Monitoring Approach

A. Indicator

Water Flow rate will be used as an indicator

B. Indicator Range

An excursion is defined as a 3-hour average scrubber water flow rate of less than 20 gal/min when scrubber is venting directly to the recuperative thermal oxidizer and less than 35 gal/min when vented directly to atmosphere. Excursions trigger an inspection, corrective action and a reporting requirements.

C. Measurement Approach

The water flow rate is monitored with a magnetic flow meter.

D. QIP (Quality Improvement Plan) Threshold

The QIP threshold is triggered when there are two (2) total excursions in a semi-annual reporting period (January 1 to June 30, or July 1 to December 31). A deviation shall be reported in the semi-annual report when the QIP threshold is triggered.

E. Performance Criteria

Data Representativeness: The flow meter is installed in the scrubber inlet line. The minimum accuracy is 0.05 gal/min. Water flow rate less than 20 gal/min (when thermal oxidizer is in

	operation) and less than 35 gal/min (when venting to atmosphere) would indicate a decrease in the performance of wet scrubber and potentially indicate an increase in VOC emissions.
Verification of operational status:	Records of water flow rate to wet scrubber readings will be maintained for two years.
QA/QC practices and criteria:	<p>1. Water Flow Meter for Scrubber, will be Calibrated Quarterly and cross validated with downstream flow meters.</p> <p>2. Annual scrubber cleaning and inspection.</p>
Monitoring frequency and data collection Procedure	Water Flow rate is measured continuously and recorded via data acquisition system.
Averaging Period:	3 hour average of 1 minute flow rates is calculated.

III **Packed Bed Scrubber (CS4) Justification**

A. Background

VOC emissions from the Beer Well (EU 4.1) and 5 Batch Fermenters (EU 4.2 to 4.6) are controlled with a packed bed water scrubber using once through water in conjunction with a recuperative thermal oxidizer (RTO).

B. Rationale for Selection of Performance Indicator

With regard to the packed bed wet scrubber, the performance indicator selected is liquid flow to the scrubber. To achieve the required emission reduction, a minimum water flow must be supplied to absorb the given amount of VOC in the gas stream, given the size of the tower and the height of the packed bed. The liquid/gas (L/G) ratio is a key operating parameter of the scrubber. If the L/G ratio decreases below a minimum value, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur. The minimum flow required to maintain the proper L/G ratio at the maximum gas flow and vapor loading through the scrubber can be determined. Maintaining this minimum liquid flow, even during periods of reduced gas flow, will ensure the required L/G ratio is achieved at all times, thereby ensuring VOC emissions are reduced.

C. Rationale for Selection of Indicator Level

The minimum water flow is based on the operating conditions during the latest performance testing that showed compliance with the current emission limits. The minimum water flow rate to the scrubber was determined to be 20 gal/min. The water flow rate to the scrubber must be maintained at this level or higher to achieve 90 percent emission reduction.

IV. **Recuperative Thermal Oxidizer (CS12) Monitoring Approach**

A. Indicator

Combustion chamber temperature and annual burner inspection

B. Measurement Approach

- Combustion chamber temperature: Proper temperature range is related to good performance.
- Annual burner inspection: Maintain proper burner operation and efficiency.

C. Indicator Range

Combustion temperature must be maintained above $1,350 \pm 50$ °F

D. Performance Criteria

Data Representativeness	To comply with NSPS 'temperature requirements', that demonstrates compliance with the emission limits.
Verification of Operational Status	A recording thermocouple will provide operating temperature of the combustion chamber
QA/QC Practices and Criteria:	Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.
Monitoring Frequency and Data:	Continuously recorded via data acquisition system
Collection Procedure:	Data acquisition system
Averaging Time	3 Hour

V. Recuperative Thermal Oxidizer (CS 12) Justification

- A. Background and Rationale for selection of Performance Indicator:
VOC emissions from the Beer Well (EU 4.1) and Batch Fermenters (EU 4.1- 4.6) are controlled using a packed bed water scrubber in conjunction with a recuperative thermal oxidizer (RTO). The background and rationale for the packed bed wet scrubber is addressed in Section III.

With regard to the RTO, the performance indicator selected is the combustion temperature as it is the best indicator of the collection and destruction efficiency of the RTO

B. Rationale for selection of Indicator Level

The minimum RTO temperature is based on the operating conditions during the latest performance testing that showed compliance with the current emission limits. The minimum combustion chamber temperature was determined to be 1350 ± 50 °F. The combustion chamber temperature must be maintained at this level or higher to achieve 99 percent overall VOC emission reduction.

Emission Point ID Number: SV5

Associated Equipment

Associated Emission Unit ID Numbers: EU7

Emissions Control Equipment ID Number: CS5

Emissions Control Equipment Description: Packed Bed Wet Scrubber

Emission Unit vented through this Emission Point: EU7

Emission Unit Description: Distillation

Raw Material/Fuel: Beer (Undistilled)

Rated Capacity: 39,303 gallons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds VOC

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Pollutant: Acetaldehyde, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Pollutant: Acrolein, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Pollutant: Formaldehyde, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Pollutant: Methanol, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Pollutant: Total HAP

Emission Limit(s): 4.17 lb/hr, (Combined limit for EP SV4, EP SV5,
EP SV6 & EP SV7), 24.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The New Source Performance Standard, 40 CFR 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, applies to this plant. See Appendix for the complete text of the Standard.

Operating Limits

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.
2. The owner or operator shall follow the applicable standards of 40 CFR 60 Subpart VV, 40 CFR 60.480 through 60.489.

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 360

Exhaust Temperature (°F): 75

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-438 S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV6

Associated Equipment

Associated Emission Unit ID Numbers: See table below

Emissions Control Equipment ID Number: CS6, CS7 and CS8,

Emissions Control Equipment Description: Multi Cyclone and Regenerative Thermal
Oxidizer

Continuous Emissions Monitors ID Numbers: TT

Emission Unit vented through this Emission Point: See table below

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SV6	8a	Rotary Distiller's Grain Dryer # 1 Process	Wet Cake	23 tons/hr
	8b	Rotary Distiller's Grain Dryer #1 Combustion	Natural Gas	55 MMBtu/hr
	9a	Rotary Distiller's Grain Dryer #2 Process	Wet Cake	23 tons/hr
	9b	Rotary Distiller's Grain Dryer #2 Combustion	Natural Gas	55 MMBtu/hr
	15	Centrifuge # 1	Whole Stillage	50 tons/hr
	16	Centrifuge # 2	Whole Stillage	50 tons/hr
	17	Centrifuge # 3	Whole Stillage	50 ton/hr
	18	Centrifuge # 4	Whole Stillage	50 tons/hr
	30	Centrifuge # 5	Whole Stillage	50 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6
567 IAC 23.3(2) "d"

- ⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀
Emission Limit(s): 10.8 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Particulate Matter
Emission Limit(s): 10.8 lb/hr, 0.1gr/dscf
Authority for Requirement; Iowa DNR Construction Permit 01-A-439 S6
567 IAC 23.4 (7)

Pollutant: Nitrogen Oxides, NO_x
Emission Limit(s): 12.7 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Volatile Organic Compounds, VOC
Emission Limit(s): 11.94 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Carbon Monoxide, CO
Emission Limit(s): 15.5 lb/hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Acetaldehyde, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Acrolein, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Formaldehyde, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Methanol, HAP
Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Pollutant: Total HAP
Emission Limit(s): 4.17 lb/hr, (Combined limit for EP SV4, EP SV5,

EP SV6 & EP SV7), 24.4 Tons/Yr (Plant-wide)
Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The New Source Performance Standard, 40 CFR 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, applies to this plant. See Appendix for the complete text of the Standard.

Operating Limits

1. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 60.489.
2. The thermal oxidizer shall maintain a temperature (3 hour average) during operation of within +/-50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the most recent performance test which demonstrated compliance with the emission limits, and shall be operated at all times the dryers or centrifuges are being used.
3. The dryers/thermal oxidizer shall combust only natural gas and/or process offgases.
4. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep hourly records of the operating temperature of the thermal oxidizer, and record all three- hour periods (during actual operation) during which the average temperature of the thermal oxidizer is more than 50 degrees Fahrenheit above or below the average temperature of the oxidizer during the most recent performance test which demonstrated compliance with the emission limits.
2. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
3. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 100

Stack Opening, (inches, dia.): 66

Exhaust Flow Rate (scfm): 65,500

Exhaust Temperature (°F): 330

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-439 S6

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant: VOC, PM

1st Stack Test to be Completed by: 1/9/2009

Test Method: 40 CFR 60, Appendix A, Method 25A (for VOC)

Iowa Compliance Sampling Manual Method 5 (for PM)

Authority for Requirement: 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment (CS 6 & 7): Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☒ No ☐

Relevant requirements of CAM plan for this equipment (CS 8): VOC

Authority for Requirement: 567 IAC 22.108(3)

Multi Cyclone Agency Operation & Maintenance Plan

This Operations and Maintenance (O & M) Plan pertains to the Multicyclones which are inherent part of the process equipments and service Emission Point SV6.

Monitoring Guidelines

Tall Corn Ethanol makes commitment to take corrective action during period of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and continue to eliminate the root cause. Source testing will be conducted to achieve compliance within the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates non compliance with emission limits, then the facility, within 60 days proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.
- Tall Corn Ethanol will maintain a written record of the observation, deficiencies and any action resulting from the inspections.

Continuous

- High level switches are present on the cyclones, monitored within the DCS to ensure appropriate cyclone operation. Activation of these high level switches will shutdown the entire dryer system.
- Tall Corn Ethanol will maintain a written record of the observation, deficiencies and any action resulting from the inspections.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours.

Daily

- Visible emissions shall be observed on a daily basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and action will be taken as soon as possible, but no later than 8 hour after the occurrence.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.

- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours.

Monthly

- An Opacity reading will be conducted once per month. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. If unsuccessful that day due to weather, an observation shall be made the following day.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours.

Semi-Annual

- Inspect the structural components including the cyclone ductwork and hoods for leaks or component failure.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours.

Annual

- Inspect the hopper unloading components.
- Check for leaks in the system to ensure the airflow from the dirty side doesn't infiltrate the clean side. Verify that the inlet and outlet ductwork is in good operating condition.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be removed to ensure proper operation.
- Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping and Reporting

- Tall Corn Ethanol will maintain a written or electronic record of all inspections and any action resulting from the inspections.
- Tall Corn Ethanol will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Authority for Requirement: 567 IAC 22.108(3)"b"

Compliance Assurance Monitoring (CAM) Plan for Regenerative Thermal Oxidizer (RTO CS-8) for VOC

I. Background

A. Emissions Unit

Facility: Tall Corn Ethanol (TCE) Coon Rapids, Iowa
Description: 5 Centrifuges (EU 15-18, 30) & 2- Distillers Grain Dryers (EU8, 9)
Identification: EU 8, 9, 15, 17, 18, 30

B. Control Equipment

Description: **Multi Cyclones(CS6, CS7)**
Regenerative Thermal Oxidizer (CS8)
Identification: CS6, CS7 and CS 8
PTE before controls: 1045.9 ton/year VOC
PTE after controls: 52.3 ton/year VOC @ 95.0% efficiency

C. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Iowa DNR Construction Permit 01-A-439-S6
VOC Emission Limit: 11.94 lb/hr VOC
Monitoring Requirements: RTO- Combustion chamber temperature and annual burner inspection

IV. Regenerative Thermal Oxidizer (CS8) Monitoring Approach

1. Indicator

Combustion chamber temperature and annual burner inspection

2. Measurement Approach

- Combustion chamber temperature: Proper temperature range is related to good performance.
- Annual burner inspection: Maintain proper burner operation and efficiency.

3. Indicator Range

Combustion temperature must be maintained above $1,650 \pm 50$ °F

4. Performance Criteria

Data Representativeness	To comply with NSPS 'temperature requirements', that demonstrates compliance with the emission limits.
Verification of Operational Status	A recording thermocouple will provide operating temperature of the combustion chamber
QA/QC Practices and Criteria:	Calibrate, maintain and operate instrumentation using procedures that take into account manufacturer's specifications.
Monitoring Frequency and Data:	Continuously recorded via data acquisition system
Collection Procedure:	Data acquisition system
Averaging Time	3 Hour

V. Regenerative Thermal Oxidizer (CS 8) Justification

- A. Background and Rationale for selection of Performance Indicator:
VOC emissions from the Centrifuges (EU 15,16,17,18 and 30) and DDGS Dryers (EU 8, 9) are controlled using a regenerative thermal oxidizer (RTO).

With regard to the RTO, the performance indicator selected is the combustion temperature as it is the best indicator of the collection and destruction efficiency of the RTO

- B. Rationale for selection of Indicator Level
The minimum RTO temperature is based on the operating conditions during the latest performance testing that showed compliance with the current emission limits. The minimum combustion chamber temperature was determined to be 1650 ± 50 °F. The combustion chamber temperature must be maintained at this level or higher to achieve 95 percent overall VOC emission reduction.

Emission Point ID Number: EP SV 6A

Associated Equipment

Associated Emission Unit ID Numbers: Dryers 1 & 2 Purge/Bypass Stack

Emissions Control Equipment ID Number: C6 & C7

Emissions Control Equipment Description: Cyclones

Emission Unit vented through this Emission Point:

Emission Unit Description: Dryers 1 & 2 Purge/Bypass Stack

Raw Material/Fuel:

Rated Capacity:

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

None at this time

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The owner or operator shall use this bypass stack only for startup purges of natural gas in the dryers or for malfunctions in the RTO control system as outlined in the "Control Equipment Operation Policy" TCE submitted to the IDNR in the application for Project 04-180

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of the frequency and amount of time the thermal oxidizer malfunctions during drying operations, and estimate the emissions emitted during said malfunctions

Authority for Requirement: Iowa DNR Construction Permit 02-A-505 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 85

Stack Opening, (inches, dia.): 66

Exhaust Flow Rate (scfm): NA- Purge or emergency bypass

Exhaust Temperature (°F): Purge

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-505 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV7

Associated Equipment

Associated Emission Unit ID Numbers: EU10
Emissions Control Equipment ID Number: CS9
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU10
Emission Unit Description: Dried Distiller's Grain Cooling Cyclone
Raw Material/Fuel: Dried Distiller's Grain
Rated Capacity: 23 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 1.1 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Particulate Matter

Emission Limit(s): 1.1 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 01-A-440 S4
567 IAC 23.4 (7)

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 1.4 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Acetaldehyde, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6
& EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Acrolein, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6 & EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Formaldehyde, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6 & EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Methanol, HAP

Emission Limit(s): 2.1 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6 & EP SV7), 9.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Pollutant: Total HAP

Emission Limit(s): 4.17 lb/hr, (Combined limit for EP SV4, EP SV5, EP SV6 & EP SV7), 24.4 Tons/Yr (Plant-wide)

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

2. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (acfm): 23,800

Exhaust Temperature (°F): 100

Discharge Style: Vertical obstructed or horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-440 S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV8

Associated Equipment

Associated Emission Unit ID Numbers: EU11
Emissions Control Equipment ID Number: CS10
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU11
Emission Unit Description: Dried Distiller's Grain Storage Silo
Raw Material/Fuel: Grain
Rated Capacity: 23 tons grain/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-441
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.1 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-441

Pollutant: Particulate Matter

Emission Limit(s): 0.1 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 01-A-441
567 IAC 23.3 (2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: Iowa DNR Construction Permit 01-A-441

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 114

Stack Opening, (inches, dia.): 4x6

Exhaust Flow Rate (acfm): 850

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed or horizontal

Authority for Requirement: Iowa DNR Construction Permit 01-A-441

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV9

Associated Equipment

Associated Emission Unit ID Numbers: EU12

Emission Unit vented through this Emission Point: EU12

Emission Unit Description: Boiler # 1

Raw Material/Fuel: Natural Gas

Rated Capacity: 81 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

Pollutant: Particulate Matter

Emission Limit(s): 0.2 lb/hr, 0.1gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 01-A-442 S3
567 IAC 23.3 (2) "a"

Pollutant: Nitrogen Oxides, NO_x

Emission Limit(s): 2.9 lb/hr, 0.04 lb/MMBtu & 25.4 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 0.32 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

Pollutant: Carbon Monoxide, CO

Emission Limit(s): 2.8 lb/hr, 0.037 lb/MMBtu & 24.53 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The NSPS standard, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to this unit. Reduced recordkeeping has been included, according to the EPA-Iowa agreement of April 16, 1998. (Please note that, reduced recordkeeping is already included in 40 CFR 60.48c (g), Subpart Dc, as per EPA letter dated 3/7/2006, attached as Appendix A. This letter is for informational purpose only.)

Authority for Requirement: 40 CFR 60 Subpart Dc
567 IAC 23.1 (2) "III"

Operating Limits

1. The unit shall combust only natural gas.
2. The total amount of natural gas combusted in all boilers plantwide (EPs SV 9, SV 10 and SV 11) shall not exceed 1,350 MMscf per twelve month rolling period.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall record monthly the amount of fuel combusted in this unit.
2. The owner or operator shall update the twelve month rolling total amount of fuel (in MMscf) combusted in all boilers plantwide on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (acfm): 30,000

Exhaust Temperature (°F): 410

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-442 S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV10

Associated Equipment

Associated Emission Unit ID Numbers: EU13

Emission Unit vented through this Emission Point: EU13

Emission Unit Description: Boiler # 2

Raw Material/Fuel: Natural Gas

Rated Capacity: 81 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

Pollutant: Particulate Matter

Emission Limit(s): 0.2 lb/hr, 0.1gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 01-A-443 S3

567 IAC 23.3 (2) "a"

Pollutant: Nitrogen Oxides, NO_x

Emission Limit(s): 2.9 lb/hr, 0.04 lb/MMBtu & 25.4 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 0.32 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

Pollutant: Carbon Monoxide, CO

Emission Limit(s): 2.8 lb/hr, 0.037 lb/MMBtu & 24.53 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The NSPS standard, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to this unit. Reduced recordkeeping has been included, according to the EPA-Iowa agreement of April 16, 1998. (Please note that, reduced recordkeeping is already included in 40 CFR 60.48c (g), Subpart Dc, as per EPA letter dated 3/7/2006, attached as Appendix A. This letter is for informational purpose only.)

Authority for Requirement: 40 CFR 60 Subpart Dc
567 IAC 23.1 (2) "III"

Operating Limits

1. The unit shall combust only natural gas.
2. The total amount of natural gas combusted in all boilers plantwide (EPs SV 9, SV 10 and SV 11) shall not exceed 1,350 MMscf per twelve month rolling period.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall record monthly the amount of fuel combusted in this unit.
2. The owner or operator shall update the twelve month rolling total amount of fuel (in MMscf) combusted in all boilers plantwide on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (acfm): 30,000

Exhaust Temperature (°F): 410

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-443 S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV11

Associated Equipment

Associated Emission Unit ID Numbers: EU14

Emission Unit vented through this Emission Point: EU14

Emission Unit Description: Boiler # 3

Raw Material/Fuel: Natural Gas

Rated Capacity: 81 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

Pollutant: Particulate Matter

Emission Limit(s): 0.2 lb/hr, 0.1gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 01-A-444 S3
567 IAC 23.3 (2) "a"

Pollutant: Nitrogen Oxides, NO_x

Emission Limit(s): 2.9 lb/hr, 0.04 lb/MMBtu & 25.4 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 0.32 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

Pollutant: Carbon Monoxide, CO

Emission Limit(s): 2.8 lb/hr, 0.037 lb/MMBtu & 24.53 Tons/Yr (Combined limit for all three Boilers SV 9, SV10 and SV11),

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

The NSPS standard, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, applies to this unit. Reduced recordkeeping has been included, according to the EPA-Iowa agreement of April 16, 1998. (Please note that, reduced recordkeeping is already included in 40 CFR 60.48c (g), Subpart Dc, as per EPA letter dated 3/7/2006, attached as Appendix A. This letter is for informational purpose only.)

Authority for Requirement: 40 CFR 60 Subpart Dc
567 IAC 23.1 (2) "III"

Operating Limits

1. The unit shall combust only natural gas.
2. The total amount of natural gas combusted in all boilers plantwide (EPs SV 9, SV 10 and SV 11) shall not exceed 1,350 MMscf per twelve month rolling period.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall record monthly the amount of fuel combusted in this unit.
2. The owner or operator shall update the twelve month rolling total amount of fuel (in MMscf) combusted in all boilers plantwide on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 30,000

Exhaust Temperature (°F): 410

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-444 S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV22

Associated Equipment

Associated Emission Unit ID Numbers: EU 19

Emission Unit vented through this Emission Point: EU19

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel

Rated Capacity: 75 gallons/hr (1000 KW)

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

Pollutant: Particulate Matter

Emission Limit(s): 1.0 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 02-A-510 S2

Pollutant: Sulfur Dioxide, SO₂

Emission Limit(s): 5.5 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 02-A-510 S2

Pollutant: Nitrogen Oxides, NO_x

Emission Limit(s): 48.24 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 0.62 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

Pollutant: Carbon Monoxide, CO

Emission Limit(s): 2.93 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

1. The maximum sulfur content of the fuel combusted in this unit shall not exceed 0.5% by weight.
2. The unit shall operate no more than 500 hours per twelve-month rolling period.
3. The emergency generator may operate for plant lighting and to run the cooling tower pumps. The unit shall not operate when other emission units are operating.
4. The unit shall be tested the first time it exceeds 250 hours of operation per twelve-month rolling period.

Reporting and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. The owner or operator shall keep records demonstrating the sulfur content of the fuel. This may be done by fuel oil vendor certification or testing using the appropriate ASTM test method for each tank of fuel received.
2. The owner or operator shall keep records of the hours of operation, and update the rolling twelve-month total hours of operation on a monthly basis.

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (scfm): 7600

Exhaust Temperature (°F): 810

Discharge Style: Vertical w/o Obstruction

Authority for Requirement: Iowa DNR Construction Permit 02-A-510 S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV Flare 1

Associated Equipment

Associated Emission Unit ID Numbers: EU20
Emissions Control Equipment ID Number: Flare1
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU20
Emission Unit Description: Ethanol Loadout
Raw Material/Fuel: Denatured Ethanol
Rated Capacity:

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-788 S3
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of (20%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 02-A-788 S3
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

1. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.
2. A maximum of 65 million gallons of denatured ethanol per twelve month rolling period plantwide may be loaded at any loadout.
3. A maximum of 53 million gallons per twelve month rolling period may be loaded at the rail loadout.

4. A maximum of 1.5 million gallons per twelve month rolling period may be loaded at the truck loadout without the flare being used for control.
5. Ethanol shall not be loaded into railcars that had been used for denaturant hauling.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of control equipment inspections and repairs
2. The owner or operator shall keep records of the amount of ethanol that is loaded both plantwide and at the rail loadout, and update the rolling twelve month total amount for each category monthly.
3. The owner or operator shall keep records of the amount of ethanol that is loaded at the truck loadout when the flare is not operating, and update the rolling twelve month total amount monthly.

Authority for Requirement: Iowa DNR Construction Permit 02-A-788 S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): 100

Exhaust Temperature (°F): 1400

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-788 S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV23

Associated Equipment

Associated Emission Unit ID Numbers: EU21
Emissions Control Equipment ID Number: CS13
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU21
Emission Unit Description: Corn Cleaning Section
Raw Material/Fuel: Corn
Rated Capacity: 75 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-577 S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 1.53 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-577 S1

Pollutant: Particulate Matter, PM

Emission Limit(s): 1.53 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-577 S1
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-577 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 116

Stack Opening, (inches, dia.): 46

Exhaust Flow Rate (scfm): 35,674

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 04-A-577 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV24

Associated Equipment

Associated Emission Unit ID Numbers: EU22
Emissions Control Equipment ID Number: CS14
Emissions Control Equipment Description: Pulse Jet Bag house

Emission Unit vented through this Emission Point: EU22
Emission Unit Description: Debranning Section
Raw Material/Fuel: Corn
Rated Capacity: 75 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-578 S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.68 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-578 S1

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.68 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-578 S1
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-578 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 116

Stack Opening, (inches, dia.): 32

Exhaust Flow Rate (scfm): 15,895

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 04-A-578 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV25

Associated Equipment

Associated Emission Unit ID Numbers: EU23

Emissions Control Equipment ID Number: CS15

Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU23

Emission Unit Description: General Exhaust System

Raw Material/Fuel: Corn (scalped)

Rated Capacity: 75 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-579 S1

567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 2.82 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-579 S1

Pollutant: Particulate Matter, PM

Emission Limit(s): 2.82 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-579 S1

567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits:

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-579 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 113

Stack Opening, (inches): 62x62

Exhaust Flow Rate (scfm): 65,865

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 04-A-579 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV 26

Associated Equipment

Associated Emission Unit ID Numbers: EU 24a, EU24b

Emissions Control Equipment ID Number: CS16

Emissions Control Equipment Description: Multi Cyclone Collector

Emission Unit vented through this Emission Point: See Table Below

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SV26	EU 24a	Corn Germ Dryer Process	Corn Germ	7 tons/hr
	EU24b	Corn Germ Dryer Combustion	Natural Gas	7.2 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1

567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 6.69 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-580 S1

Pollutant: Particulate Matter, PM

Emission Limit(s): 6.69 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-580 S1

567 IAC 23.3(2) "a"

Pollutant: Sulfur Dioxide, SO₂

Emission Limit(s): 500 ppm

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1

567 IAC 23.3(3)

Pollutant: Volatile Organic Compounds, VOC

Emission Limit(s): 4.5 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 116

Stack Opening, (inches): 49x28

Exhaust Flow Rate (scfm): 52,000

Exhaust Temperature (°F): 120

Discharge Style: Vertical w/ obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant: PM

1st Stack Test to be Completed by: 1/9/2009

Test Method: Iowa Compliance Sampling Manual Method 5

Authority for Requirement: 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐

Relevant requirements of O & M plan for this equipment (CS16): Particulate Matter

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Multi Cyclone Collector (Corn Germ Dryer) Agency Operation & Maintenance Plan

This Operations and Maintenance (O & M) Plan pertains to the Multicyclones which are inherent part of the process equipments and service Emission Point SV6.

Monitoring Guidelines

Tall Corn Ethanol makes commitment to take corrective action during period of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and continue to eliminate the root cause. Source testing will be conducted to achieve compliance within the applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates non compliance with emission limits, then the facility, within 60 days proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.
- Tall Corn Ethanol will maintain a written record of the observation, deficiencies and any action resulting from the inspections.

Continuous

- Pressure drops shall be observed within the DCS to insure appropriate cyclone operations. High level switches will sound an audio alarm when activated. Appropriate corrective actions shall be taken to manage and resolve the occurrence.
- Tall Corn Ethanol will maintain a written record of the observation, deficiencies and any action resulting from the inspections.
- If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Daily

- Visible emissions shall be observed on a daily basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed this would be an exceedence not a violation and action will be taken as soon as possible, but no later than 8 hour after the occurrence.

- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected, the appropriate measures for remediation will be implemented within eight (8) hours.

Semi-Annual

- Inspect the structural components including the cyclone ductwork and hoods for leaks or component failure.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours.

Annual

- Inspect the hopper unloading components.
- Check for leaks in the system to ensure the airflow from the dirty side doesn't infiltrate the clean side. Verify that the inlet and outlet ductwork is in good operating condition.
- Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be removed to ensure proper operation.
- Clean cyclone inlet and ensure they operate according to manufacture specifications.
- Tall Corn Ethanol will maintain a written record of the observations, deficiencies and any action resulting from the inspection.
- If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping and Reporting

- Tall Corn Ethanol will maintain a written or electronic record of all inspections and any action resulting from the inspections.
- Tall Corn Ethanol will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- All instruments and control equipment will be calibrated, maintained, and operated according to the manufacture specifications.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: SV27

Associated Equipment

Associated Emission Unit ID Numbers: EU25
Emissions Control Equipment ID Number: CS17
Emissions Control Equipment Description: Bag house

Emission Unit vented through this Emission Point: EU25
Emission Unit Description: Germ Conveyor and Receiver
Raw Material/Fuel: Corn Germ
Rated Capacity: 7 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-581
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.11 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-581

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.11 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-581
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-581

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches): 12x12

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-581

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV28

Associated Equipment

Associated Emission Unit ID Numbers: EU26
Emissions Control Equipment ID Number: CS18
Emissions Control Equipment Description: Bag house

Emission Unit vented through this Emission Point: EU26
Emission Unit Description: Fiber Receiver
Raw Material/Fuel: Fiber
Rated Capacity: 75 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-582
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.11 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-582

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.11 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-582
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-582

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches): 12x12

Exhaust Flow Rate (scfm): 2,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/ obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-582

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV29

Associated Equipment

Associated Emission Unit ID Numbers: EU 27

Emissions Control Equipment ID Number: CS19

Emissions Control Equipment Description: Pulse Jet Bag house

Emission Unit vented through this Emission Point: EU 27

Emission Unit Description: Hammermill #1

Raw Material/Fuel: Endosperm

Rated Capacity: 22 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-583 S1
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.39 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-583 S1

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.39 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-583 S1
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-583 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches): 16x21

Exhaust Flow Rate (scfm): 9,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/ obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-583 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV 30

Associated Equipment

Associated Emission Unit ID Numbers: EU 28
Emissions Control Equipment ID Number: CS 20
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU 28
Emission Unit Description: Hammermill # 2
Raw Material/Fuel: Endosperm
Rated Capacity: 22 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-584
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.39 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-584

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.39 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-584
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-584

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches): 18x24

Exhaust Flow Rate (scfm): 9,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/ obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-584

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides

documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV 31

Associated Equipment

Associated Emission Unit ID Numbers: EU 29
Emissions Control Equipment ID Number: CS21
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU 29
Emission Unit Description: Pneumatic Flour Conveyor/ Receiver
Raw Material/Fuel: Flour
Rated Capacity: 74 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-979
567 IAC 23.3(2) "d"

⁽¹⁾ An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.184 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-979

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.184 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-979
567 IAC 23.3(2) "a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

1. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. The owner/operator shall maintain the following records:

1. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 04-A-979

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 60

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 4,300

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/ obstruction

Authority for Requirement: Iowa DNR Construction Permit 04-A-979

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV32

Associated Equipment

Associated Emission Unit ID Numbers: EU 31

Emission Unit vented through this Emission Point: EU 31
Emission Unit Description: Air Heater (In Corn Separation Building)
Raw Material/Fuel: Natural Gas
Rated Capacity: 6.63 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 04-A-580 S1
567 IAC 23.3(2) "d"

⁽¹⁾An exceedance of the indicator opacity of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedance continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter, PM₁₀

Emission Limit(s): 0.13 lb/hr

Authority for Requirement; Iowa DNR Construction Permit 04-A-1006

Pollutant: Particulate Matter, PM

Emission Limit(s): 0.13 lb/hr, 0.1 gr/dscf

Authority for Requirement; Iowa DNR Construction Permit 04-A-1006
567 IAC 23.3(2) "a"

Pollutant: Sulfur Dioxide, SO₂

Emission Limit(s): 500 ppm

Authority for Requirement: Iowa DNR Construction Permit 04-A-1006
567 IAC 23.3(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Indoor Source

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): 65,000

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 04-A-1006

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: WFB

Associated Equipment

Associated Emission Unit ID Numbers: EU WFB

Emission Unit vented through this Emission Point: WFB

Emission Unit Description: Wet Fiber Building

Raw Material/Fuel: Wet Fiber

Rated Capacity: 25 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No Applicable Requirements at this time

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): Indoor Source

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): NA

Exhaust Temperature (°F): 100

Discharge Style: NA

Authority for Requirement: Iowa DNR Construction Permit 04-A-980

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Cooling Tower
Associated Equipment

Associated Emission Unit ID Number:

Emission Unit vented through this Emission Point: CT
Emission Unit Description: Cooling Tower
Raw Material/Fuel: NA
Rated Capacity:

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3 (2) "d"

Pollutant: Particulate Matter, PM
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 13.3(2) "a"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FUGITIVE 1

Associated Equipment

Associated Emission Unit ID Numbers: EU Fugitive 1

Emission Unit vented through this Emission Point: EU Fugitive 1
Emission Unit Description: Corn Receiving- Truck & Railcar
Raw Material/Fuel: Corn
Rated Capacity: None

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: F002

Associated Equipment

Associated Emission Unit ID Numbers: F002

Emission Unit vented through this Emission Point: F002

Emission Unit Description: Fugitive Dust Emissions from Truck Traffic

Raw Material/Fuel: NA

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust (Opacity)

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for requirement: Iowa DNR Construction Permit 07-A-1286
567 IAC 23.3(2)"c"(1)

Pollutant: Particulate Matter

Emission Limit(s): 11.03 ton/yr

Authority for requirement: Iowa DNR Construction Permit 07-A-1286

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

The owner or operator shall apply chemical dust suppressants at the rate and frequency required by the manufacturer's specifications to achieve a minimum of 80% fugitive dust control. Chemical suppressants shall be applied at minimum of once per month. If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35.0 F (1.70 C) or conditions due to weather, in combination with the application of the chemical dust suppressant, could create hazardous driving conditions, then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date as the conditions preventing the application have been abated.

Reporting & Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records of the number of trucks that unload/load material on a monthly basis.
2. The owner or operator shall test a representative road for surface silt content once per month, prior to the application of dust suppressant. After 12 tests, the company may request that the DNR review the results and determine if there is still a need for continued testing.
3. The owner or operator shall keep records of dust suppressant application (date, location of suppressant application, and amount). In addition, owner or operator shall document all deviations from scheduled chemical suppressant application (include date, scheduled location of suppressant application, reasons for not applying suppressant). The owner or operator shall also keep a copy of the manufacturer's specifications for achieving 80% dust suppression available for inspection.
4. The owner or operator shall calculate and record the monthly fugitive dust emissions according to the following formula, which uses the equations from AP-42 Section 13.2.2, the PM empirical constants, and assumes a mean vehicle weight of 27.5 tons, 80% dust suppression, and an average of 0.25 miles per truck delivery or loadout.

$$E = V * 0.00033 * (s/12)^{0.7}$$

Where E = tons PM/month

V = number of trucks that month

s = surface silt content in % from that month's test results,

(8% silt content would be s = 8)

5. The owner or operator shall update monthly the twelve month rolling total of PM emissions by adding up the calculated monthly emissions for the previous twelve months. Immediately notify the DNR if the twelve month rolling total exceeds 12.30 tons.

Authority for requirement: Iowa DNR Construction Permit 07-A-1286

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter ^{(1), (2)}

Frequency – Monthly Basis, 12-month rolling total

Test Method – Silt Testing, Recordkeeping

Authority for Requirement - Iowa DNR Construction Permit 07-A-1286

- (1) **If an initial compliance demonstration specified above is testing**, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 (PM - 11.30 ton/yr) within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
- (2) **If subsequent testing is specified above**, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 (PM - 11.30 ton/yr) according to the frequency noted above.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Fugitive 2

Associated Equipment

Associated Emission Unit ID Numbers: EU Fugitive 2

Emission Unit vented through this Emission Point: EU Fugitive 2

Emission Unit Description: Equipment Leaks

Raw Material/Fuel: NA

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No Applicable Requirements at this time. VOC Emissions.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FUGITIVE 3

Associated Equipment

Associated Emission Unit ID Numbers: EU Fugitive 3

Emission Unit vented through this Emission Point: EU Fugitive 3

Emission Unit Description: Ethanol Rail Loading

Raw Material/Fuel: NA

Rated Capacity: NA

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

No Applicable Requirements at this time. VOC Emissions.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV12

Associated Equipment

Associated Emission Unit ID Numbers: TK-001

Emission Unit vented through this Emission Point: TK-001

Emission Unit Description: 190 Proof Ethanol Tank

Raw Material/Fuel: 190 Proof Ethanol

Rated Capacity: 180,000 gallons

Applicable Requirements

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

Subpart VV, *Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1 (2) "nn"

NSPS Applicability

Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1 (2) "ddd"

Operating Limits

1. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

2. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the source.

Authority for Requirement: Iowa DNR Construction Permit 01-A-445

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (acfm): NA- Natural Vent

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: Iowa DNR Construction Permit 01-A-445

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV13

Associated Equipment

Associated Emission Unit ID Numbers: TK-002

Emission Unit vented through this Emission Point: TK-002
Emission Unit Description: Unleaded Gasoline/ Denaturant Tank
Raw Material/Fuel: Unleaded Gasoline (Denaturant)
Rated Capacity: 60,000 gallons

Applicable Requirements

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984*, applies to this source. See Appendix for the complete text of the Standard.

Operating Limits

1. The tank shall store material with a maximum true vapor pressure, as defined in 40 CFR 60.111b, of less than 76.6 kPa.
2. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
2. The owner or operator shall keep records of the maximum true vapor pressure of each material stored in this tank.
3. The owner or operator shall keep records as required in 40 CFR 60.115b (a) and 40 CFR 60.116b.

Authority for Requirement: Iowa DNR Construction Permit 01-A-446 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (acfm): Natural Ventilation

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: Iowa DNR Construction Permit 01-A-446 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV14

Associated Equipment

Associated Emission Unit ID Numbers: TK-003

Emission Unit vented through this Emission Point: TK-003

Emission Unit Description: Denatured Ethanol Tank

Raw Material/Fuel: Denatured Ethanol

Rated Capacity: 1,000,000 gallons

Applicable Requirements

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

Subpart VV, *Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry*, applies to this source. Subpart VV is attached in Appendix. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1 (2) "nn"

NSPS Applicability

Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1 (2) "ddd"

Operating Limits

1. The tank shall store material with a maximum true vapor pressure, as defined in 40 CFR 60.111b, of less than 76.6 kPa.
2. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
2. The owner or operator shall keep records of the maximum true vapor pressure of each material stored in this tank.
3. The owner or operator shall keep records as required in 40 CFR 60.115b (a) and 40 CFR 60.116b.

Authority for Requirement: Iowa DNR Construction Permit 01-A-447 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 51

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (acfm): Natural Ventilation

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: Iowa DNR Construction Permit 01-A-447 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV15

Associated Equipment

Associated Emission Unit ID Numbers: TK-004

Emission Unit vented through this Emission Point: TK-004

Emission Unit Description: Denatured Ethanol Tank

Raw Material/Fuel: Denatured Ethanol

Rated Capacity: 1,000,000 gallons

Applicable Requirements

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

Subpart VV, *Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1 (2) "nn"

NSPS Applicability

Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1 (2) "ddd"

Operating Limits

1. The tank shall store material with a maximum true vapor pressure, as defined in 40 CFR 60.111b, of less than 76.6 kPa.
2. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
2. The owner or operator shall keep records of the maximum true vapor pressure of each material stored in this tank.
3. The owner or operator shall keep records as required in 40 CFR 60.115b (a) and 40 CFR 60.116b.

Authority for Requirement: Iowa DNR Construction Permit 01-A-448 S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 51

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (acfm): Natural Ventilation

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: Iowa DNR Construction Permit 01-A-448 S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SV17

Associated Equipment

Associated Emission Unit ID Numbers: TK-006

Emission Unit vented through this Emission Point: TK-006

Emission Unit Description: 200 Proof Ethanol Tank

Raw Material/Fuel: 200 Proof Ethanol

Rated Capacity: 180,000 gallons

Applicable Requirements

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NSPS Applicability

Subpart VV, *Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1 (2) "nn"

NSPS Applicability

Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced after July 23, 1984*, applies to this source. See Appendix for the complete text of the Standard.

Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1 (2) "ddd"

Operating Limits

1. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Reporting and Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.
2. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. This record shall be kept for the life of the source.

Authority for Requirement: Iowa DNR Construction Permit 01-A-449

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 49

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (acfm): NA Natural Vent

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: Iowa DNR Construction Permit 01-A-449

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108(14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108(9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107(4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by

January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.

7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.

2. Remedy any cause of excess emissions in an expeditious manner.

3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.

4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in *567 IAC 131.2(2)*. *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup,

shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other

requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by

affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under *567 IAC 22.1(2)*, the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to *567 IAC 22.8*, or permits required pursuant to *567 IAC 22.4* and *567 IAC 22.5*. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with *567 IAC 23.1(3)"a"*, and *567 IAC 23.2(3)"g"* when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations, training fires and controlled burning of a demolished building. *567 IAC 23.1(3)"a"*, and *567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by *567 IAC 23.2*. *567 IAC 23.2 except 23.2(3)"h"*; *567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited.

Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless

the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements.*567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-264

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

APPENDIX*

- A. Reduced Recordkeeping under NSPS Subpart DC**
- B. 40 CFR 60 Subpart A- General Provisions**
- C. 40 CFR 60 Subpart VV- Standards of Performance for Equipment leaks in Synthetic Chemicals manufacturing industry.**
- D. 40 CFR 60 Subpart Dc- Standards of Performance for Small Industrial-Commercial – Institutional Steam Generating Units.**
- E. 40 CFR 60 Subpart Kb- Standards of Performance for Volatile Organic Liquid storage vessels**
- F. 40 CFR 60 Subpart DD- Standards of Performance for Grain Elevators**

* The text of 40 CFR Part 60 (STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES) can be found in the following link:

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=1ef7e2f95bd403e38dcba477f80d84&tpl=/ecfrbrowse/Title40/40cfr60_main_02.tpl